

In re Patent Application of:
MCCARTHY ET AL.
Serial No. 10/779,402
Filed: **FEBRUARY 13, 2004**

In the Claims:

This listing of claims replaces all prior versions and listing of claims in the application.

1. (Currently Amended) A communications system comprising:

a plurality of servers connected together in a network for processing a plurality of different job types having respective different resource usage characteristics associated therewith;

each server, after beginning execution of at least one job, determining a respective health metric thereof based upon the at least one job being ~~processed~~ executed thereby and weighting the health metric based upon the respective resource usage characteristic of the at least one job, the resource usage characteristic representing resources being consumed by the at least one job;

said servers mapping the weighted health metrics for different resource usage characteristics to a common scale; and

a dispatcher for collecting the commonly scaled weighted health metrics from said servers by polling said servers for the weighted health metrics and distributing jobs to said servers based thereon.

2. (Original) The communications system of Claim 1 wherein the resource usage characteristics comprise at least one processing utilization characteristic and at least one input/output utilization characteristic.

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3. (Original) The communications system of Claim 1 further comprising a knowledge base for cooperating with said dispatcher for storing the weighted health metrics.

4. (Cancelled)

5. (Original) The communications system of Claim 1 wherein said servers provide completed job results to said dispatcher, and wherein the weighted health metrics are provided to said dispatcher with the completed job results.

6. (Original) The communications system of Claim 5 further comprising at least one load generator for generating the jobs for said servers and communicating the jobs to said dispatcher; and wherein said dispatcher further provides the completed job results to said at least one load generator.

7. (Cancelled)

8. (Original) The communications system of Claim 1 wherein the jobs relate to electronic mail (e-mail) processing.

9. (Currently Amended) A load distributor for a plurality of servers connected together in a network for processing a plurality of different job types having respective different resource usage characteristics associated therewith, and each server, after beginning execution of at least one job,

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determining a respective health metric thereof based upon the at least one job being ~~processed~~ executed thereby and weighting the health metric based upon the respective resource usage characteristic of the at least one job, the resource usage characteristic representing resources being consumed by the at least one job, the load distributor comprising:

a dispatcher for collecting the commonly scaled weighted health metrics from said servers by polling said servers for the weighted health metrics and distributing jobs to said servers based thereon;

said servers mapping the weighted health metrics for different resource usage characteristics to a common scale; and

a knowledge base for cooperating with said dispatcher for storing the commonly scaled weighted health metrics.

10. (Original) The load distributor of Claim 9 wherein the resource usage characteristics comprise at least one processing utilization characteristic and at least one input/output utilization characteristic.

11. (Cancelled)

12. (Original) The load distributor of Claim 9 wherein the servers provide completed job results to said dispatcher module, and wherein the weighted health metrics are provided to said dispatcher with the completed job results.

13. (Cancelled)

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14. (Currently Amended) A job distribution method for a plurality of servers connected together in a network, the servers for processing a plurality of different job types having respective different resource usage characteristics associated therewith, the method comprising:

determining a respective health metric of each server after it begins execution of at least one job based upon the at least one job being ~~processed~~ executed thereby and weighting the health metric based upon the respective resource usage characteristic of the at least one job, the resource usage characteristic representing resources being consumed by the at least one job;

polling the servers for the weighted health metrics and mapping the weighted health metrics for different resource usage characteristics to a common scale; and

distributing jobs to the servers based upon the commonly scaled weighted health metrics.

15. (Original) The method of Claim 14 wherein the resource usage characteristics comprise at least one processing utilization characteristic and at least one input/output utilization characteristic.

16. (Cancelled)

17. (Currently Amended) A computer-readable medium having computer-executable instructions for distributing jobs to

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a plurality of servers connected together in a network for processing a plurality of different job types having respective different resource usage characteristics associated therewith, and each server, after beginning execution of at least one job, determining a respective health metric thereof based upon the at least one job being ~~processed~~ executed thereby and weighting the health metric based upon the respective resource usage characteristic of the at least one job, the resource usage characteristic representing resources being consumed by the at least one job, the load distributor comprising:

a dispatcher for collecting the commonly scaled weighted health metrics from said servers by polling said servers for the weighted health metrics and distributing jobs to said servers based thereon;

the servers mapping the weighted health metrics for different resource usage characteristics to a common scale; and

a knowledge base module for cooperating with said dispatcher module to store the weighted health metrics.

18. (Original) The computer-readable medium of Claim 17 wherein the resource usage characteristics comprise at least one processing utilization characteristic and at least one input/output utilization characteristic.

19. (Cancelled)

20. (Original) The computer-readable medium of Claim 17 wherein the servers provide completed job results to said

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dispatcher module, and wherein the weighted health metrics are provided to said dispatcher module with the completed job results.

21. (Cancelled)

22. (New) The communications system of Claim 1, wherein the at least one job comprises e-mail delivery.

23. (New) The communications system of Claim 6, wherein said at least one load generator comprises an e-mail aggregation engine.

24. (New) The communications system of Claim 6, wherein said servers also provide completed job results to said at least one load generator.

25. (New) The load distributor of Claim 9, wherein the at least one job comprises e-mail delivery.

26. (New) The load distributor of Claim 12 further comprising at least one load generator for generating the jobs for said servers and communicating the jobs to said dispatcher; and wherein said dispatcher further provides the completed job results to said at least one load generator.

27. (New) The method of Claim 14, wherein the at least one job comprises e-mail delivery.

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28. (New) The computer-readable medium of Claim 17,
wherein the at least one job comprises e-mail delivery.